

REMARKS

Claims 1-3, 7-14 and 16-26 are pending in the application. Claims 1, 18 and 26 have been amended. Support for the amendment is found throughout the application, including page 7, lines 4-5, and page 11, lines 25-31.

Claim Rejection Under 35 U.S.C. § 102(b)

Claims 1-3, 7, 9-10, 19-20, 22 and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,625,875 to Frauenglass. The Examiner states that Frauenglass discloses “a combination of a mixture of a thermoplastic resin including polyester thermoplastic resins and an anaerobic thermosetting resin which was a methacrylate resin would have been mixed together and would have been applied upon threaded components of fasteners in order to permanently secure the components together. . . .” (emphasis added)

Applicants have amended claims 1 and 26 to recite that the curable mechanical fastener comprising a fastener surface is at least partially fabricated from a curable material. Frauenglass discloses a mixture of thermoplastic resin and anaerobic adhesive which is prepared as a coating material (col 1 line 58) which is deposited onto a threaded pipe or fastener (col 1 line 74 –col 2 line 2). The fastener is not fabricated from the thermoplastic polymer/adhesive mixture. Further, Frauenglass fails to disclose a fastener that is repeatedly attachable and unattachable, i.e., a screw coated with an anaerobic adhesive is not repeatedly attachable and unattachable.

Frauenglass fails to disclose a fastener that is at least partially fabricated from a curable material of any type. Accordingly, Frauenglass fails to disclose each and every element of claims 1-3, 7, 9-10, 19-20, 22 and 26. MPEP § 2131. Applicants respectfully submit that the 35 U.S.C. § 102(b) rejection should be withdrawn.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-3, 7, 9-10, 13, 16 and 18-27 are rejected under 35 U.S.C. § 103(a) as obvious over Cohen (USPN 4,239,829) in view of Frauenglass. The Examiner states that Cohen teaches “to apply a slow curing thermosetting adhesive upon the two components of a hook and loop type mechanical fastener . . .” The Examiner acknowledges that Cohen fails to disclose the thermoplastic resin, and uses Frauenglass for that disclosure.

Applicants respectfully traverse the rejection. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. See M.P.E.P §706.02(j).

Cohen does not teach or suggest fabricating the fastener from a curable material of any type. Rather, Cohen's resin is an additive external to the hook and loop fastener. For the reasons discussed above under the 102(b) rejection, Frauenglass fails to cure the deficiencies of Cohen.

Claims 8 and 12 are additionally rejected under 35 U.S.C. § 103(a) as obvious over Cohen and Frauenglass in view of Alexander (US 4,155,327) or Bachmann (US 3,814,156) or Pearce, Jr (US 3,469,490). The Examiner relies on these disclosures to substitute the anaerobic adhesive in Frauenglass with the epoxy resin of Cohen.

Claim 11 is additionally rejected under 35 U.S.C. § 103(a) as obvious over Cohen and Frauenglass in view of Modern Plastics Encyclopedia and "admitted prior art." The Examiner relies on these disclosures to provide a semi-crystalline polyester for the thermoplastic polyester in Frauenglass.

Claims 20 and 28 are additionally rejected under 35 U.S.C. § 103(a) as obvious over Cohen and Frauenglass in view of Crivello. The Examiner relies on these disclosures to provide a Crivello to teach radiation cure of a functionalized thermoplastic as an alternative to the epoxy resin of Cohen.

For the reasons stated above, none of the additional references cited can cure the deficiencies of Cohen as a reference. As Cohen does not teach making the fastener itself from any curable material, Cohen cannot be combined with a reference that teaches mixtures of various materials to arrive at the elements of Claim 1 as amended. Even if, for the sake of argument, Cohen did include a modifier that could be considered a thermoplastic material (which Cohen does not teach or suggest), Cohen only discloses the epoxy resin as a coating or additive on the hook and loop fastener. Neither Cohen nor the other references teach or suggest fabricating the fastener out of any curable material.

Applicants are struggling with attempts to make this clearer when the Examiner also seems to recognize that the references only discuss applying adhesive to a fastener. See Office Action, page 4, Section 5, second paragraph which states "[h]owever, in the

art of applying adhesive to mechanical fasteners, it was known to apply as an alternative..."

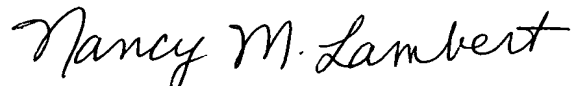
In additional 35 U.S.C. § 103(a) rejections over Cohen and Frauenglass, Claims 14 and 18 are rejected as obvious in view of Melbye; and claim 17 is rejected as obvious in view of Lu or Appeldorn. The Examiner relies on Melbye's disclosure to recite the mushroom shaped filaments in a mechanical fastener system; Lu and Appeldorn's disclosures for recessed and protruding components of a fastener. For the reasons stated above, none of the additional references cited can cure the deficiencies of Cohen as a reference.

All the references cited by the Examiner disclose mechanical fasteners coated with some kind of a curable adhesive system. None of the references teach or suggest use of curable materials of any type to fabricate the fastener. Applicants respectfully submit that the rejections under 35 U.S.C. § 103(a) are improper and should be withdrawn.

Conclusion

In view of the arguments and amendments offered herein, Applicants respectfully submit that the Examiner's grounds for objection and rejection are overcome and respectfully solicit reconsideration and withdrawal of the rejections to place the application in condition for allowance.

Respectfully submitted,



Nancy M. Lambert
Registration No. 44,856
Attorney for Applicants

NML:jlh/54570US002 RCE After Appeal 3-19-04
Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, Minnesota 55133-3427
(651) 733-2180
Facsimile: (651) 736-3833

Dated: March 19, 2004